

**Claims**

1. Use of aqueous, isocyanate-free polyurethane dispersions having a solid matter content of  $\geq 30$  weight percent and a solvent content of  $\leq 10$  weight percent in formulations for sports floor coverings.
2. Use according to claim 1, characterized in that the solid matter content of polyurethane dispersions ranges from 40 to 70 weight percent.
3. Use according to claims 1 and 2, characterized in that the polyurethane dispersions have a solvent content of  $< 5$  weight percent.
4. Use according to claims 1 and 2, characterized in that the polyurethane dispersions are present in solvent-free form.
5. Use according to claims 1 through 4, characterized in that the average particle size of micelles of polyurethane polymers is equal to 100 to 500 nm, preferably 200 to 400 nm.
6. Use according to claims 1 through 5, characterized in that the polyurethane polymers have an average molecular mass of 25,000 to 100,000 Daltons.
7. Use according to claims 1 through 6, characterized in that the polyurethane dispersions are used as bonding agents for elastic layers comprising rubber granulates or fibers as well as optionally additives.
8. Use according to claims 1 through 6, characterized in that the polyurethane dispersions are applied as adhesion promoters or primary coats onto the undersurface of sports floor coverings.
9. Use according to claims 1 through 6, characterized in that the polyurethane dispersions, in some cases having structural filler material, are applied as spray coats onto elastic or stiff undersurfaces.
10. Use according to claims 1 through 6, characterized in that the polyurethane dispersions are applied as flow coats onto elastic or stiff undersurfaces.

11. Use according to claims 1 through 6, characterized in that the polyurethane dispersions are used as filler material for sealing pores of undersurfaces of sports floor coverings.
12. Use according to claims 1 through 6, characterized in that the polyurethane dispersions are used as adhesives for gluing prefabricated elastic layers for sports floor coverings.
13. Use according to claims 1 through 6, characterized in that the polyurethane dispersions, in some cases pigmented, are used for sealing sports floor coverings.
14. Use according to claims 9, 10, and 13, characterized in that the polyurethane dispersions contain 0.1 to 1.0 weight percent of UV stabilizers based on sterically hindered amines relative to the total weight of the formulation.
15. Use according to one of the preceding claims, characterized in that the formulated polyurethane dispersions are applied to elastic or stiff undersurfaces in layers having a total thickness of 0.1 to 50 mm.
16. Use according to one of the preceding claims, characterized in that the formulated polyurethane dispersions are applied in a quantity of 0.1 to 10.0 kg per m<sup>2</sup> of surface to be coated and per work cycle.
17. Use according to one of the preceding claims, characterized in that the formulated polyurethane dispersions are applied as a one-component formulation.

APP A, >